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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/735,606	12/14/2000	Gerard Hartnett	P66021US0	5782

7590 01/09/2004

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WASHINGTON, DC 20004

EXAMINER

NGUYEN, VAN H

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 01/09/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/735,606

Applicant(s)

HARTNETT, GERARD

Examiner

VAN H NGUYEN

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action is in response to amendment A filed October 10, 2003. Claims 2-13 remain in this application.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. As to claim 12, “the adapter objects” lacks antecedent basis. Claim 12 has no “adapter objects” term that defines or supports the given reference.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-10, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Edmond et al.** "*R-OK: A Reflective Model for Distributed Object Management*" School of Information Systems, Queensland University of Technology (pp.1-8).

7. **As to claim 13**, Edmond teaches the invention substantially as claimed including a control framework (*the R-OK model*; abstract/ *a flexible framework*; page.7, right column, fourth paragraph) for control of services (*for providing structured descriptions and coordinated execution of several reflective distributed computing tasks*; page 7, right column, fourth paragraph), the control framework comprising an application domain level (*domain knowledge...problem domain*; page 1, left column/*domain level*; page 5, right column, last paragraph) comprising control logic domain objects (*domain objects*; abstract and page.7, right column, third paragraph) having object classes (*classes and objects*; page.7, right column, third paragraph), and a meta level (*the metalevel*; abstract) comprising meta objects (*Metaobjects*; abstract/*meta-objects*; page.7, right column, third paragraph) which represent the domain object classes (*used to describe and monitor every domain object in the system*; abstract/*meta-objects which convey information about or control the implementation and interpretation of their respective domain objects*; page.7, right column, third paragraph) and comprise means for interfacing with the services to isolate the domain objects from the services (*meta-objects which convey information about or control the implementation and interpretation of their respective*

domain objects...every object is described and monitored...the combination of these metaobjects provides the means to describe the structure and behaviour of domain objects; page.7, right column, third paragraph).

Edmond does not explicitly use the terms “*a telecommunication controller and telecommunication services.*” Edmond, however, teaches *providing structured descriptions coordinated execution of several reflective distributed computing tasks such as object communication and method dispatching to remote objects* (page 7, right column, fourth paragraph).

It would have been obvious to apply the teaching of Edmond for *a telecommunication controller and telecommunication services* in order to provide a means for managing domain objects and meta objects and generating high performance controller for a wide variety of applications.

8. **As to claim 3**, Edmond teaches the meta objects are structured in a hierarchy of abstract classes for declaring actions and attributes (page 6, right column).

9. **As to claim 4**, Edmond teaches wherein the meta objects comprise means for invoking actions on domain objects and changes to attributes of domain objects (page 6, right column).

10. **As to claim 5**, Edmond teaches the controller comprises a key class naming objects in the domain level (page 5, left column).

11. **As to claim 6**, Edmond teaches the meta level defines containment of domain level objects and the domain level comprises means for automatically notifying the meta level of containment modification (page 7, left column).

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12. **As to claim 7**, Edmond teaches means for interrogating a base object containment hierarchy to locate a required object in response to a request from a requesting object (page 5, right column).
13. **As to claim 8**, Edmond teaches the meta objects comprise means for performing persistence data operations transparently to the domain objects (page 6, right column).
14. **As to claim 9**, Edmond teaches the meta objects comprise means for updating a data backup controller for fault tolerance transparently to the domain objects (page 3, right column).
15. **As to claim 10**, Edmond teaches means for verifying base object proposals to update real resource attributes (page 7, left column).
16. **As to claim 12**, Edmond teaches the adapter objects are contained in a services level in the controller (page 1, right column and page 7, right column).
17. Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Edmond et al.** in view of **Rubin** (U.S. 5,155,842) cited by Applicant in IDS paper #3.
18. **As to claim 2**, Edmond does not explicitly teach “the meta objects comprise event channels for automatic notification to subscribers. ”

Rubin teaches the meta objects comprise event channels for automatic notification to subscribers (*notifying programs that a logical event has occurred on a network*; abstract).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Rubin with Edmond because it would have

provided the capability for monitoring logical events on a network and performing a function call to alert all users of the occurrence of the event.

19. **As to claim 11**, Edmond does not explicitly teach “means for publishing events on channels to notify adapter objects. ”

Rubin teaches means for publishing events on channels to notify adapter objects (abstract).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Rubin with Edmond because it would have provided the capability for monitoring logical events on a network and performing a function call to alert all users of the occurrence of the event.

Response to Arguments

20. Applicant's arguments filed on October 10, 2003 have been fully considered, but are deemed to be moot in view of the new grounds of rejection.

21. Applicant's arguments presented issues which required the Examiner to further view the previous rejection. The Examiner conducted a further search regarding the issues mentioned in Applicant's response. Therefore, all arguments regarding the cited references of the previous rejection are moot in view of the new grounds of rejection.

22. In the remarks, Applicant argued in substance that (1) there does not appear to be any disclosure in Hayes-Roth of a domain level comprising control logic domain objects having

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object classes; (2) the “meta-controller of Hayes-Roth does not have objects which represent the domain objects.

In response to points (1) and (2), the Examiner agrees. The claim limitations, however, are met by the combination of Edmond and Rubin as discussed in the rejection above.

Conclusion

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kiyoki et al.

U.S. 6269365

issued date: 07/2001

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H NGUYEN whose telephone number is (703) 306-5971. The examiner can normally be reached on Monday-Thursday from 8:30AM - 6:00PM. The examiner can also be reached on alternative Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703) 305-9678.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9000.

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Any response to this action should be mailed to:

Commissioner for Patents

PO Box 1450

Alexandria, VA 22313-1450

or fax to:

(703) 746-7239 (for formal communications intended for entry)

(703) 746-7238 (for After Final communications)

(703) 746-7240 (for informal or draft communications)

VHN

January 05, 2003



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